Ichthyology.
Edw. D. Cope,
Thaddeus Norris,
J. H. Redfield,
Chas. F. Parker,
A. G. Reed.

Herpetology.
Edw. D. Cope,
Harrison Allen,
Samuel B. Howell,
Chas. F. Parker,
J. Wilson.

Chemistry.
F. A. Genth,
Robt. Bridges,
Edw. Goldsmith,
Samuel B. Howell,
Rachel Bodley.

Instruction and Lectures.
Hector Tyndale,
J. Aitken Meigs,
W. S. W. Ruschenberger,
Howard N. Potts,
Aubrey H. Smith.

Library.
Jos. Leidy,
Chas. F. Parker,
Geo. W. Tryon, Jr.,
W. S. W. Ruschenberger,
J. G. Richardson.

February 2.

The President, Dr. Ruschenberger, in the chair.

Twenty-eight members present.

The following papers were presented for publication:—

"Curious Anomaly in the History of Certain Larvæ of Acronycta Oblinita, Guenée." By Thomas G. Gentry.

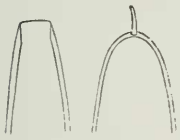
"Notes on the Noctuidæ, with Descriptions of Certain New Species." By H. R. Morrison, Cambridge, Mass.

Notes on some Parasitic Worms.—Prof. Leidy remarked that Mr. Henry Horn, assistant superintendent at the Zoölogical Garden, had given to him several specimens of worms, recently passed by a Bengal tiger. There are three males and eight females, and they appear to be the *Ascaris mystax*, which has been found in many other feline species, including the domestic cat and the lion. The characters of the worms from the tiger are as follows: Body almost equally tapering towards the extremities. *Female*—Cephalic end inflexed, with long narrow semi-lanceolate alæ. Caudal end straight; tail short, conical, subacute. *Male*—Cephalic end straight, alated. Caudal end inflexed, and furnished with a row of about two dozen minute round papillæ on each side ventrally; tail short, conical, acuminate. Length of females from

2 to $3\frac{1}{4}$ inches; thickness from $\frac{1}{4}$ to $\frac{1}{2}$ line. Length of males from 13 to 16 lines; thickness from $\frac{1}{6}$ to $\frac{1}{5}$ line.

Prof. Leidy further remarked that Mr. Thomas Meehan had submitted to his examination some worms which had been found in an apple. They consisted of one entire individual and the anterior half of a second, and apparently pertain to the *Mermis acuminata*, a long thread-worm which has been discovered infesting the larvæ of many insects. Among others it is parasitic in the larva of the codling-moth, or fruit-moth of the apple, which readily accounts for its presence in the fruit. Twenty-five years ago (Proc. 1850, 117) he had described a worm, belonging to the collection of the Academy, and labelled as having been obtained from a child's mouth, which was evidently the same species. It having been in a child's mouth is probably to be explained by supposing that the child had eaten an infected apple.

Fig. 1.

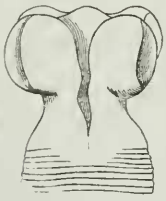


Head. Tail.
40 diam.

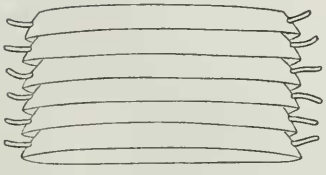
The characters of the present specimens of the worm, both females, are as follows: Body filiform, pale fuscous, narrower anteriorly. Head conical, truncate, with the mouth simple and unarmed. Caudal extremity thicker than the head, obtusely rounded, and furnished with a minute spur-like process. Length 5 inches 8 lines; cephalic end at mouth $\frac{1}{12}$ mm.; a short distance below $\frac{1}{5}$ mm.; middle of body $\frac{3}{8}$ mm.; near caudal end $\frac{1}{4}$ mm.; mucro $\frac{1}{12}$ mm. long, $\frac{1}{80}$ mm. thick.

From an Australian wombat, which recently died at the Zoölogical Garden, Prof. Leidy had obtained from the stomach two specimens of a tapeworm of the genus Taenia. They are three inches long, and about four lines broad at the last joint. The characters are as follows: Entire worm elongated and compressed pyramidal. Head quadrate, narrowing below, convex above, furnished laterally with four prominent hemispherical bothria. Neck short, constricted. Segments of the body very short and wide, campanulate with the projecting points giving the body laterally a serrate appearance. From the intermediate joints a narrow conical papilla protruded from each side of the same joint, but none could be made to protrude from the back joints, from which globular white ova were expressed measuring 0.052 mm. diameter. Head $\frac{3}{4}$ of a line in

Fig. 2.



Head. 12 diam.



Segments 1 inch from head. 9 diam.

breadth. One inch from the head six segments occupied the space of a line; at the posterior part of the body four segments occupied the same extent. The species appears not to have been previously described, and may, therefore, be named TAENIA BIPAPILLOSA.

The Extinct Batrachia of Ohio.—Prof. COPE stated that the explorations of the coal measures in eastern Ohio conducted during the past season by Prof. Newberry, State Geologist, had increased the number of species of extinct Batrachians to thirty-three. A new genus and species were described under the name of *Pleuroptyx clavatus*, which is remarkable for the structure of its ribs. Each of these presents a wide thin ala on its posterior face, which is abruptly discontinued below. The shaft of the rib is short and enlarged distally, where it is hollow and truncate. The vertebræ are as large as those of the anaconda, and there is no ventral armature preserved. Another genus exhibits two strata of chevrons in an armature of ventral rods, the angle of the upper having an opposite direction to that of the lower. The gular scuta are smooth. It was named *Hyphasma lævis*. An interesting addition to the fauna was stated to be a new species of the horned genus *Ceraterpeton*, Huxl. The head is relatively large, and covered with recticulate ridges separated by rows of impressed dots. Horns long, stout, and incurved. It was called *C. punctolineatum*.

Prof. PERSIFOR FRAZER, Jr., exhibited a combination of the polarizer, vertical lantern, and microscope, by means of which the manner in which different salts crystallized out of their solutions, together with the manner in which they affect polarized light, was explained and illustrated by solutions of potassium chlorate and urea in alcohol. The light from a lime lantern is passed through the elbow-tube polarizer, thence upward through the vertical lantern and the two-inch lens microscope, when it is again reflected horizontally on the screen. After the formation of the crystals had been shown by plain polarized light, the analyzer was inserted and the characteristic colors of polarization produced. It was explained that while this method had the advantage of so magnifying the crystals produced from small quantities of solutions that their structure could be minutely observed, as well as the sudden molecular change which caused the polarizing effect, it was open to the objection of a very large loss of light—first, by the polarizer, and again by the microscope. It was suggested that a means of obviating at least a part of this difficulty would be the use of the parabolic reflector, in connection with the first condenser.

Prof. Frazer then proceeded to exhibit the microscopic structure of thin sections of some of the Palæozoic rocks found in York and Adams Counties, Pa. A map of the region whence the specimens were collected was first thrown on the screen and the geological

formations described. After explaining the manner in which the thin sections were prepared, the following specimens were exhibited: A piece of Diorite from the northeastern corner of Saxony, a foliated chlorite slate, ferruginous gneiss. Nes'silicon steel ore, Diorite, quartzite rock with magnetic iron ore from the northeastern part of York County, hornblende slate, limestone containing particles of a substance probably apatite, a syenite from Germany, with hornblende, quartz, and orthoclase, and a syenite from near Gettysburg. The gizzard of a cockroach was also exhibited and shown to produce beautiful colors in polarized light.

February 9.

The President, Dr. Ruschenberger, in the chair.

Nineteen members present.

Notes on some Parasitic Worms.—Prof. Leidy exhibited some nematoid worms, on which he made the following remarks:—

One of the species is common in feline animals, and is the *Ascaris mystax*. The specimens, consisting of fifteen females and five males, had been sent to Dr. Chapman, by Mr. Thompson, Superintendent of the Zoological Garden, who reports that they had been passed by the American wild-cat. The females measure from $2\frac{1}{2}$ to 4 inches in length, by $\frac{2}{5}$ to $\frac{2}{3}$ of a line in thickness. The males measure from $2\frac{1}{4}$ to $2\frac{1}{2}$ inches in length, by $\frac{1}{3}$ to $\frac{1}{2}$ a line in thickness. The specimens are larger, and the alæ of the head proportionally better developed, and therefore more conspicuous than in those noticed at the previous meeting as having been passed by the Bengal tiger. The worms of the tiger are such as have been described under the name of *Ascaris leptotera*, which appears to be only a variety of *A. mystax*.

The other worm is a *Filaria*, apparently an undescribed species. Half a dozen individuals of the two sexes were obtained from the peritoneal cavity of an Australian Whallabee, which recently died in the garden of the Zoological Society. The characters of the parasite are as follow:—

Filaria spelæa.—Body filiform, translucent whitish, tapering at the extremities. Cephalic end straight, obtusely rounded, furnished with four equidistant papillæ around the mouth. Caudal end narrowest, rather abruptly attenuated, and spirally rolled once or twice, and terminating obtusely. A distinct anal aperture observable in the female. A row of eight papillæ on each side ventrally of the caudal end of the male; three in advance and the others back of the genital aperture. Penis a long, tubular style, thick at the upper part, narrow and curved below. Accessory piece a short, thick, curved tube, widening at the upper end in a spade-like, furcate portion.